ABSTRACT OF THE DISCLOSURE

Conventionally, when the coordinates detection characteristic of a coordinates input apparatus was nonlinear correction of the input coordinates could not always be accurately performed.

The present invention is a coordinates correction apparatus and a coordinates correction method including a parameter keeping means for keeping quadratic nonlinear conversion constants as coordinates correction parameters and a memory medium storing a coordinates correction control program for receiving coordinates of locations optionally indicated on a coordinates input area and correcting the coordinates received in the coordinates reception step by quadratic nonlinear conversion using the coordinates correction parameters kept by the parameter keeping means.

Preferably, it further comprises a parameter calculation step for calculating coordinate correction parameters for nonlinear conversion and causing the coordinates correction parameters to be kept by the parameter keeping means.

Further, the present invention is a coordinates correction parameter calculation apparatus and a coordinates correction parameter calculation method for calculating coordinates correction parameters for correction of the coordinates of locations optionally indicated on the coordinates input area of a

coordinates input apparatus by nonlinear conversion and a memory medium storing a coordinates correction parameter calculation program for receiving the coordinates of indicated locations corresponding to

5   multiple reference points with differing locations established on a coordinates input area from the coordinates input apparatus and calculating the nonlinear equation coordinates correction parameters for coordinates correction by solving simultaneous

10   equations by applying the received coordinates to the nonlinear equations for coordinates correction.

Given the embodiment of the present invention, four coordinates are stored by a first through a fourth coordinates keeping means via a switching means when

15   four coordinates are input indicating four reference points established on the coordinates input area when coordinates correction parameters are not kept in the parameter keeping means. The parameter calculation means calculates the coordinates correction parameters

20   for nonlinear conversion by solving simultaneous equations based on these four coordinates and causes the parameter keeping means to keep them. When coordinates are input from the coordinates input part when parameters are kept by the parameter keeping means

25   the switching means causes correction of the input coordinates by the input coordinates correction means. The input coordinates correction means corrects the

input coordinates accurately by nonlinear conversion
using the parameters kept in the parameter keeping
means and outputs the corrected coordinates to a
coordinates output means.

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